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## Training and development in small professional services firms

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## Training and development in small professional services firms

### ABSTRACT:

#### Purpose:

This study examined whether participation in training and development (T&D) events is associated with employees' affective commitment and propensity to enact innovative behaviours in small professional services firms. The study also investigated associations between both *attitudes towards T&D* and *policy and practice supportive of T&D* and levels of participation in T&D events.

#### Design/methodology/approach:

Data from 203 employees in small professional services firms employing 50 or fewer staff were analysed using regression analysis and PROCESS macro.

#### Findings:

Only *policy and practice supportive of T&D* was associated with participation levels. Participation in T&D events was positively related to affective commitment. Furthermore, employees who participated in more T&D events were more likely to enact innovative behaviours, while affective commitment mediated the positive relationship between number of T&D events attended and innovative behaviours. Contrary to expectations, neither participation in just training, nor participation in just development, was associated with either attitudes or behaviours.

#### Practical implications:

The findings have important implications for small firms which tend to rely on wholly work-based experiences for the development of employees' knowledge and skills. Such an approach to learning for work may inadvertently shape a workforce that lacks commitment to the organisation and that has a diminished capacity for innovative behaviours.

#### Originality/value:

There is limited research on how T&D affects attitudes and behaviours in small firms. Large and small firms are fundamentally different, thus findings from studies in large firms may not extend to small firms.

**Keywords:** training and development, small firms, affective commitment, innovative behaviour

In a rapidly changing and highly competitive global economy, differentiation among competing firms on the basis of their human capital resources becomes increasingly important (Aguinis and Kraiger, 2009). A firm's human capital is a key factor in its economic survival and its ability to achieve a sustained competitive advantage (Barney, 1991). Learning through employee participation in formal training and development (T&D) programs influences the development of human capital resources (Noe *et al.*, 2014). Training is the systematic approach that affects individuals' knowledge, skills, and attitudes particular to a specific occupation, and, if it is based on the science of training and learning, it should lead to changes in cognition, behaviour, and affect (Salas *et al.*, 2012). Development, on the other hand, refers to systematic efforts aimed at affecting individuals' knowledge, skills, and attitudes for the purposes of personal growth or future jobs and/or roles (Aguinis and Kraiger, 2009). Reviews of T&D literature have identified the multiple benefits of T&D for individuals, teams, organisations, and society (Aguinis and

Kraiger, 2009; Salas and Cannon-Bowers, 2001).

Small firm employees are less likely to obtain access to formal T&D events than are employees in large firms (Hoque and Bacon, 2006; Kotey and Folker, 2007). Studies have identified several ‘barriers’ to the provision of firm-sponsored, formal T&D in smaller firms (e.g., Bai *et al.*, 2017). Thus, small firms have a strong preference for and are highly reliant upon informal learning processes (Coetzer *et al.*, 2017). However, as Bishop (2008, p. 661) has noted, “While it is crucial that we recognise the importance of informal aspects of learning in small firms (as in all organisations), it would be hazardous to advance a position that accords no importance at all to formal training.” For example, in some types of jobs, just informal learning activities would not be sufficient to acquire the depth of understanding necessary for complex work activities that require high level conceptual knowledge (Clardy, 2018). Furthermore, opportunities for formal learning stimulate participation in informal learning activities (Bednall and Sanders, 2017).

Very few studies have examined associations between employee participation in T&D events and key work-related attitudes and behaviours in smaller firms (Cardon and Valentin, 2017). These studies typically investigate such associations within small and medium-sized enterprises (SMEs), but do not disaggregate SMEs into small and medium-sized organisations and test the hypothesised relationships in each context. As Lai *et al.* (2016) have noted, medium-sized businesses tend to be more similar to large businesses than small businesses, and thus they are managed in a relatively more formalised, professionalised, and structured manner compared to small businesses. To address this limitation of the literature, our study focussed on firms with 50 or fewer employees. This size category closely aligns with the European Union headcount definition of a small firm: a firm with fewer than 50 employees (Muller *et al.*, 2015).

The present study addresses the under-researched area of links between formal, structured T&D events and employees’ attitudes and behaviours in small firms and makes the following additional specific contributions to literature. First, this study examines the separate effects of employee participation in *development* events and *training* events on employees’ affective commitment and propensity to enact innovative work behaviours (IWBs). This line of inquiry helps cast light on the nature of additional benefits (beyond knowledge and skill acquisition) that might accrue from employee participation in different types of T&D activities. **Training may have relatively stronger association with IWBs, because it focuses on providing employees with knowledge, skills, attitudes and behaviours needed to do a particular task or job (Salas et al., 2012). Development, in contrast, may have a relatively stronger association with affective commitment, because of its focus on providing employees with knowledge, skills, attitudes and behaviours related to their personal or professional growth (Aguinis and Kraiger, 2009).** Second, this study explores the potential mediating role of affective commitment in the relationship between the number of T&D events attended and IWBs. Third, this study extends research on associations between participation in T&D events and employees’ attitudes and behaviours by incorporating measures of both *policies and practices supportive of T&D* and *attitudes towards T&D* in our research model.

### **Background and rationale**

Human resource development (HRD) in smaller firms is a neglected area of research (Cardon and Valentin, 2017; Nolan and Garavan 2016; Short and Gray 2018). For example Nolan and Garavan (2016) conducted a systematic review of research into HRD in SMEs from 1995 to 2014. They examined 31 journals and found only 117 relevant papers. HRD includes formal, structured T&D activities and as Tam and Gray (2016, 672) noted, “much of what is known

empirically about HRD comes from the studies of large organisations.” Thus, the current knowledge base is deficient, because small and large firms are fundamentally different (Welsh and White, 1981) and context affects employee attitudes and behaviours (Johns, 2006). Regarding employee attitudes, there is a need to determine whether the generally positive impact of investment in T&D on employees’ affective commitment in large organisations (e.g., Newman *et al.*, 2011) can be extended to small professional services firms. As regards behaviours, although stimulating employee-driven innovation through knowledge and skill development activities is a key factor in small firm success (Lundkvist and Gustavsson, 2018; OECD, 2013), Sheehan *et al.* (2014, p.4) noted that “only a handful of studies have explicitly examined the relationship between HR practices and firm’s innovation rates and no previous work has focussed exclusively on HRD’s role in innovation”.

In studies that have examined the effects of T&D on employees’ attitudes and behaviours, the upper firm size limit is typically about 100 employees. Findings of these studies may not apply to firms with 50 or fewer employees, because the level of formal T&D activity is related to firm size (Hoque and Bacon, 2006; Kotey and Folker, 2007). Furthermore, these studies typically do not examine relationships between different types of T&D events and the employee attitudes and behaviours being studied. Nor do they include work environment conditions that facilitate or inhibit participation in T&D. To illustrate, Rowden and Conine (2005) explored relationships between participants’ engagement in three types of learning (i.e. informal, incidental, and formal) and their job satisfaction in commercial banks employing fewer than 100 employees. All three measures of workplace learning were positively and significantly related to job satisfaction. The formal learning scale included items that measured respondents’ perceptions of planned, organised training activities. Pajo *et al.* (2010) examined associations between employee participation in formal T&D, employee attitudes, and withdrawal responses. They obtained data through a questionnaire completed by employees in a diverse range of SMEs employing between 6–99 employees. The scale used to measure participation in formal T&D comprised six different types of T&D events and by summing across the items an overall participation score was computed. Their analyses showed that participation in T&D was positively related to perceived organisational support, which was, in turn, positively associated with both job satisfaction and affective commitment. Furthermore, their results indicated that those who participated in more T&D events were less likely to have intentions to leave their organisations and less likely to engage in neglectful behaviours. Finally, Dhar (2015) examined associations between training, organisational commitment and service quality in small and medium-sized hotels located in India. Employees were asked to respond to questions about their perceptions of accessibility to training, support for training, and the benefits of training. A three-item scale was used to measure perceived access to training. Employees were also asked to respond to questions about their level of organisational commitment. The hotel’s customers were asked to rate service quality. After analysing responses from employees and customers, the researcher found that employees’ perceptions of training accessibility, support, and benefits had a strong positive impact on their levels of organisational commitment. Organisational commitment, in turn, was positively related to customers’ perceptions of service quality. However, in this study, the researcher did not define what constituted a ‘small’ and a ‘medium-sized’ hotel.

In sum, the sample studies outlined above highlight the need for research located in firms with 50 or fewer employees that (1) examines links between T&D events and key work-related attitudes and behaviours; (2) provides more fine-grained analysis of associations between different types of T&D events and key work-related attitudes and behaviours; and (3) includes variables that assess work environment conditions which facilitate or inhibit employee

participation in T&D. All these issues are addressed in the present study.

### **Conceptual model and hypotheses**

**This section presents the conceptual model (see Figure 1) and briefly reviews some of the evidence for the proposed links. As noted, few studies have examined associations between employees' participation in T&D and their attitudes and behaviours in the small firm context. Similarly, quantitative research that examines work context variables in small firms that facilitate or inhibit employee participation in T&D is sparse. Accordingly, the development of hypotheses has drawn primarily on studies conducted in larger firms.**

**(Insert Figure 1 about here)**

#### *Support for T&D*

**Work context variables influence learning and development behaviour in organisations (Lancaster and Di Milia, 2014; Maurer, 2002). More specifically, it is well documented that the level of employee participation in T&D activity is influenced by the level of social support for participation (Bell *et al.*, 2017; Maurer and Tarulli, 1994). Thus, managers' and peers' attitudes towards participation in formal, structured T&D activity and the consequential level of social support that they provide specifically to the focal employee are likely to affect the employee's levels of participation in T&D events (Kraimer *et al.*, 2011). Similarly, policy and practice supportive of T&D, which is an important component of the broader notion of organisational support for T&D, is an important factor that influences levels of participation in T&D (Bell *et al.*, 2017; Kraimer *et al.*, 2011). Policies relating to T&D, such as providing paid release time for learning and development purposes, signals to the workforce that senior management are committed to supporting employee participation in T&D activity (Maurer and Lippstreu, 2008). Likewise, organisational practices supportive of T&D, such as providing employees with material that describes T&D courses that are being offered, are likely to increase the level of employee participation in T&D activity (Lancaster and Di Milia, 2014). Therefore, it is proposed that:**

*Hypothesis 1: Both attitudes towards T&D, and policy and practice supportive of T&D, will be associated with levels of participation in T&D events.*

#### *T&D and affective organisational commitment*

Meyer and Allen (1991) distinguished three forms of organisational commitment: affective, continuance, and normative commitment. The present study focuses on affective commitment, which denotes an employee's emotional attachment to, identification with, and involvement in their work organisation (Meyer, 2017). In a meta-analytic review, which included a review of the antecedents of organisational commitment, Meyer *et al.* (2002) found that work experiences related to perceived organisational support (POS) was the most influential antecedent variable associated with affective commitment. Employees' POS denotes "general beliefs concerning how much the organisation values their contributions and cares about their well-being" (Eisenberger *et al.*, 2001, p. 42). Based on the results of their meta-analysis, Meyer *et al.* (2002) argued that managers who wish to engender employees' affective commitment must demonstrate their own commitment by providing a supportive work environment. Such a work environment would include the provision of employee access to T&D opportunities (Grossman and Salas, 2011).

Employees view opportunities to participate in T&D as organisationally provided benefits, because T&D can improve their job performance, career prospects, and employability (Aguinis and Kraiger, 2009). Access to T&D may motivate employees to reciprocate through positive organisational behaviours, such as higher levels of in-role and extra-role performance, as well as displaying greater loyalty to the organisation (Meyer *et al.*, 2002; Wayne *et al.*, 1997). Given that small firms are characterised by resource constraints (Lai *et al.*, 2016), access to T&D opportunities are likely to be highly valued by their employees and engender a strong sense of obligation to reciprocate. The principle of reciprocity, or repayment in kind, is central to social exchange theory, which postulates that employees reciprocate the treatment they receive at work (Emerson, 1976). In sum, based on the results of prior studies of antecedents and consequences of affective commitment (Meyer *et al.*, 2002), it could reasonably be argued that participation in T&D events will contribute to more affectively committed employees. Accordingly, it is proposed that:

*Hypothesis 2a: Participation in T&D events will be positively related to affective commitment.*

*Hypothesis 2b: Participation in training events will be positively related to affective commitment, after controlling for the effects of participation in development events.*

*Hypothesis 2c: Participation in development events will be positively related to affective commitment, after controlling for the effects of participation in training events.*

#### *T&D and IWBs*

According to De Jong and Den Hartog (2010), IWBs are “a broad set of behaviours related to the generation of ideas, creating support for them, and helping their implementation” (p. 23). Employees who are affectively committed to their organisation are likely to be concerned about the organisation’s economic viability and competitive advantage and thus demonstrate a propensity to enact IWBs, because such behaviours are beneficial to the organisation (Jafri, 2010; Xerri and Brunetto, 2013). IWB is considered in-role behaviour and thus part of the employee’s core task performance in some jobs (e.g. design engineer). However, in most jobs such behaviour is considered to be discretionary, extra-role behaviour (Ng and Feldman, 2010; 2013).

Innovation is typically viewed as a multi-stage process with different behaviours necessary at each stage. De Jong and Den Hartog (2010) identify four elements of innovative behaviour: (1) idea exploration (e.g., seeking ways to improve current products, services, and processes); (2) idea generation (e.g., combining and reorganising existing concepts to solve problems or improve performance); (3) idea championing (e.g., finding support, building coalitions); and (4) idea implementation (e.g., developing new products or work processes, testing, and modifying them). Innovation processes are characterised by discontinuous activities, rather than discrete sequential stages, therefore at any one time innovative individuals can be involved in any combination of the innovative behaviours (Scott and Bruce, 1994). Thus, there are a variety of ways in which employees can contribute to innovation processes in organisations.

**Both individual and contextual factors influence employee IWB (Montani *et al.*, 2014), but individual factors were not included in this study.** There is a widely held view that, on the whole, small firms benefit from internal management and organisation conditions that are conducive to IWBs, such as flat organisational structures, lack of a silo mentality, minimal bureaucracy, quick decision-making, entrepreneurial spirit, and the capacity to respond swiftly to the shifting external environment (Bommer and Jalajas, 2004; Freeman and Engel, 2007).

Research has identified several other conditions in the work environment that can act as stimulants or obstacles to innovation (Montani *et al.*, 2014). One important condition is access to job resources, including access to learning opportunities (Choi, 2004). As Hammond *et al.* (2011) noted, “As individuals gain knowledge and experience, they build a larger and more integrated repository of response possibilities, which include ideas, facts, and cognitive scripts, from which to draw creative ideas to problems.” Therefore, access to leading-edge knowledge through employee participation in T&D can increase a firm’s propensity to innovate (Bauernschuster *et al.*, 2009). Consistent with the foregoing arguments, it is proposed that:

*Hypothesis 3a: Participation in T&D events will be positively related to employee enactment of IWBs.*

*Hypothesis 3b: Participation in training events will be positively related to employee enactment of IWBs, after controlling for the effects of participation in development events.*

*Hypothesis 3c: Participation in development events will be positively related to employee enactment of IWBs, after controlling for the effects of participation in training events.*

*Hypothesis 4: The positive relationship between participation in T&D events and employee enactment of IWBs is mediated by affective commitment.*

## **Method**

### *Respondents and procedure*

Employees in professional roles, working in privately owned and operated firms with 50 or fewer employees were sought as participants. This group was chosen because they are knowledge workers and are required to remain abreast of industry trends, maintain their technical knowledge in the field, and develop the skills required to perform their role. Business directories and Internet searches were used to identify suitable businesses in Perth, Western Australia. A total of 52 businesses were approached and 38 agreed to participate. The researchers visited each business and discussed the purpose of the research with the owner–manager. Owner–managers who agreed to participate in the study allowed the researchers access to their employees by either agreeing to distribute the questionnaire among the staff or requesting that the researchers outline the study to their employees and detail how the questionnaire would be administered. On average, a maximum of 10 questionnaire packages were left with each business for approximately one week. These packages included the questionnaire, an envelope, and an information letter. Participants were encouraged to read the information letter and complete the questionnaire in their free time, such as at home or during their lunch break. Once complete, the questionnaire was placed in the envelope provided and sealed. The participant’s name was not collected - neither on the questionnaire nor the envelope. The completed questionnaires were collected by the researchers on an agreed date. From a total of 232 questionnaires issued, about 87 percent or 203 satisfactory completed questionnaires were received. The demographic data for the study’s participants are in Table 1. ANOVA analysis was used to determine if there were significant differences in T&D participation levels among sub-categories of the following demographics: gender, age, employment type, job category education level and participants’ time in their job. There were statistically significant differences ( $p = .039$ ) between males (mean = 2.167) and females (mean = 1.804); but there were no significant differences between the other sub-categories of demographics.

(Insert Table 1 about here)

### *Measures*

The concepts ‘training’ and ‘development’ are variously defined in the literature (Garavan, 1997). In this paper, training refers to systematic efforts aimed at providing employees with the knowledge, skills, attitudes and behaviours needed to do a particular task or job (Salas et al., 2012). Development, on the other hand, refers to systematic efforts aimed at providing employees with knowledge, skills, attitudes and behaviours related to their personal or professional growth (Aguinis & Kraiger, 2009). Participation in T&D events was measured using six items adopted from Pajo *et al.* (2010). Participants were required to indicate the number of times in the last 12 months that they had participated in six different types of T&D events, such as training courses run by outside companies, and formal coaching or mentoring programs. The six T&D events comprised three types of training events and three types of development events. **In our study, responses were captured on a 7-point scale ranging from 0 to ‘more than 5’. Participation scores were calculated by summing across the items.**

Both *policies and practices supportive of T&D* and *attitudes towards T&D* were each measured using eight items that were adapted from measures contained in Tannenbaum (1997). Sample items for policies and practices supportive of T&D are: “I was asked about my training needs during the last year” and “Employees are rewarded for using what they have learned in training on the job”. Sample items to assess attitudes towards T&D are: “Training is viewed positively by most people” and “Training is valued”. All responses were coded 1 = strongly disagree through to 7 = strongly agree.

Affective commitment was measured using six items from the scale developed by Meyer and Allan (1991). Examples of items included: “I would be very happy to work at this company until I retire” and “I do not feel emotionally attached to this company.” All responses were coded 1 = strongly disagree through to 7 = strongly agree.

IWB was measured using six items that assessed the key innovative behaviours identified by de Jong and den Hartog (2010) and a 7-point frequency scale ranging from ‘never’ to ‘always’. The behaviours included idea exploration, idea generation, idea championing, and idea implementation. This scale relied upon the self-rating of individuals’ IWBs, which was considered appropriate based on prior studies such as Ng and Feldman (2010) and Ma Prieto and Pe’rez-Santana (2014). Moreover, employees are better placed than supervisors to know how innovative ideas are generated, championed and implemented (Ng and Feldman 2013; Montani *et al.*, 2014). Furthermore, research has found that self-rating and supervisor-rating results converge (Ng and Feldman 2013).

### **Analyses**

Data were analysed using Statistical Package for the Social Sciences (SPSS) version 25. **Prior to the hypotheses testing, several statistical tests were conducted.** The reliabilities of the constructs were tested at a threshold of  $> .70$  (Sekaran, 2003). To obtain adequate reliability for the affective commitment construct, two items were dropped from the analysis because of poor loadings. **Descriptive analysis was conducted to determine means and standard deviations for all the variables.** Bivariate correlations were determined to test inter-correlations among constructs. **Three types of analyses were used to test the hypotheses. First, multiple regression analysis was employed to test hypotheses 1. Second, hierarchical regression analysis was used to test hypotheses 2b, 2c, 3b and 3c. The predictor variable was entered**



into model one. Control and predictor variables were entered into model two. This was done to determine how much variance the predictor variable explained in the criterion variable, after controlling for the effect of the control variable. Third, PROCESS macro analysis (version 3.0) was employed to test hypothesis 4, because it provides a direct test of the mediating effect (Chen and Shaffer, 2017; Hayes, 2013). PROCESS macro uses a bootstrapping method to determine indirect effects. In this study, data were bootstrapped to 5000 at 95% bias-corrected confidence intervals. Macro model 4 was used for the analysis due to the simple mediation analysis. In PROCESS macro, significant effect is obtained if zero does not fall between the confidence intervals (Hayes, 2013). In the PROCESS macro model, the mediating effect was confirmed by using Preacher and Kelley's (2011) Kappa-squared and Sobel test. Furthermore, because macro model 4 produces results of direct relationships, hypotheses 2a and 3a were tested using PROCESS macro.

To determine if common method bias (CMB) was a concern, Harman's one-factor test (Podsakoff *et al.*, 2003) was used. CMB was not a concern, because the result (i.e. 43.98% of variance explained by a single factor) was less than the threshold of 50%.

## Results

Table 2 contains the means, standard deviations, correlations and Cronbach  $\alpha$  of the constructs. **Data in the table shows the following: participation in T&D events is significantly positively correlated with both affective commitment and IWB; affective commitment is significantly positively correlated with IWB; and training policies and practices is significantly positively correlated with participation in T&D. However, the results show no significant relationship between attitudes towards T&D and participation in T&D events.** The results also show adequate reliabilities of constructs, because the Cronbach  $\alpha$  score of each construct exceeded .70 (Sekaran, 2003).

(Insert Table 2 about here)

Table 3 shows results relating to the effects of *attitudes towards training* and *training policies and practices* on participation in T&D events. The results indicate a significant positive relationship between training policies and practices and participation in T&D ( $\beta = .455$ ,  $p < .001$ ). However, the results indicate no significant relationship between attitudes towards training and participation in T&D ( $\beta = -.108$ ,  $p > .05$ ). Thus, the results partially support hypothesis 1.

(Insert Table 3 about here)

Table 4 shows the results for the mediating effect of affective commitment in the relationship between participation in T&D events and IWB. The results indicate a significant and positive relationship between participation in T&D and affective commitment ( $B = .2850$ ,  $LLCI = .1408$ ,  $ULCI = .4292$ ). This implies that an increase in participation in T&D corresponds to an increase in affective commitment. The results supports hypothesis 2a. The results also indicate a significant and positive relationship between participation in T&D events and IWB ( $B = .2357$ ,  $LLCI = .0845$ ,  $ULCI = .3869$ ), which supports hypothesis 3a. The results demonstrate that affective commitment significantly and positively mediated the relationship between participation in T&D and IWB ( $\beta = .0788$ ,  $LLCI = .0343$ ,  $ULCI = .1112$ ). The Kappa-squared and Sobel test results also indicate that the relationship between participation in T&D and IWB was mediated by affective commitment ( $Z = 2.7$ ,  $p = .007$ ,  $\kappa^2 = .0371$ ). Thus, the results support

hypothesis 4.

(Insert Table 4 about here)

Table 5 shows results relating to hierarchical regression of participation in *training* events and participation in *development* events on affective commitment. **The results show that, after controlling for the effect of participation in training events, participation in development events was not significantly related to affective commitment ( $\beta = .224, p > .05$ ). Therefore, the results do not support hypothesis 2b. Similarly, the results indicate no significant relationship between participation in training events and affective commitment ( $\beta = .053, p > .05$ ), after controlling for the effect of participation in development. Thus, hypothesis 2c was not supported.**

(Insert Table 5 about here)

Table 6 shows results for hierarchical regression of participation in training events and participation in development events on IWB. **The results show a non-significant relationship between participation in training events and IWB ( $\beta = .055, p > .05$ ), after controlling for the effects of participation in development. Thus, hypothesis 3b was not supported. Similarly, the results indicate a non-significant relationship between participation in development events and IWB ( $\beta = .236, p > .05$ ), after controlling for the effects of participation in training events. Thus, the results do not support hypothesis 3c.**

(Insert Table 6 about here)

## Discussion

Despite the numerical and economic significance of small firms in national economies (Storey 2018) and the profound impact of employee participation in T&D on organisational success (Aguinis and Kraiger, 2009), there is a surprising lack of research on HRD in small businesses (Short and Gray 2018). More specifically, there is scant research that has examined how employee participation in T&D might affect employee attitudes and behaviours (Cardon and Valentin, 2017). Our study addressed this area of neglect and the results of our analyses are largely consistent with tenets of social exchange theory (Emerson, 1976) and the notion of perceived organisational support (Eisenberger *et al.*, 1997). The results make four empirical contributions to the literature on T&D in small firms.

The first contribution is that our results provide preliminary evidence that policy and practice supportive of T&D is a potentially better predictor of T&D participation levels than the respondent's impressions of prevailing attitudes towards T&D. Of the two antecedents, just policy and practice supportive of T&D had a statistically significant relationship with T&D participation levels. One potential explanation for this result is that policy and practice supportive of T&D is a relatively more concrete construct than attitudes towards training. Therefore, future studies that pursue a similar line of inquiry to the present study should include measures of policy and practice as a contextual variable in the research design, as a means of gauging employer support for participation in T&D. Furthermore, social support from the focal employee's immediate workplace supervisor and co-workers is likely to also influence his or her voluntary participation in T&D events (Kyndt and Baert, 2013). Therefore, future research should also include indicators of these two types of social support.

The second contribution is that this study demonstrated empirically the important role that T&D

can play in shaping small firm employees' work-related attitudes. More specifically, the results showed that the actual number of T&D events in which employees participate is positively related to their levels of affective commitment (Hypothesis 2a). This is a significant finding because affective commitment is an important predictor of voluntary employee turnover (Allen *et al.*, 2010). Small professional services firms must compete with large firms for talented staff in the labour market. Large firms have greater labour market power because they are relatively well-resourced and offer better prospects of career development and internal promotion (Williamson, 2000). Accordingly, small firms are likely to experience high levels of turnover among their more ambitious employees. Thus, providing employee access to T&D can be a key factor in attracting and retaining high-performing staff through positively influencing their affective commitment. Future research could employ a purposeful sampling approach and in consultation with owner-managers recruit strategically valuable and high performing employees to determine how access to T&D opportunities might affect their affective commitment and turnover intentions. Contrary to expectations, neither involvement in just formal training events (after controlling for participation in development), nor involvement in just development events (after controlling for participation in training), was associated with improvements in employee affective commitment (Hypotheses 1b and 1c).

The third contribution of this study is that it provides preliminary evidence that employees who participate in more T&D events have a greater propensity to enact IWBs (Hypothesis 2a). Thus, employees who participate in T&D events that are based on the science of training and learning should improve both their job performance (Salas *et al.*, 2012) and their capacity for innovation, which is itself directly related to job performance. For example, when employees participate in off-site T&D, they acquire new knowledge and insights and have opportunities to develop external contacts. With new knowledge and insights, and external contacts, employees have greater capacity to engage in IWBs because the T&D event and their external contacts expose them to more diverse perspectives and ideas that may help stimulate their creativity (de Jong and den Hartog, 2010). Future research should examine the potentially differing relations between employee participation in external T&D and internal T&D and employees' propensity to enact IWB. Contrary to expectations, our results show that neither involvement in just formal training events (after controlling for participation in development), nor involvement in just formal development events (after controlling for participation in training), is associated with a greater propensity to enact IWBs (Hypotheses 2b and 2c).

The fourth contribution of the study is that it develops an understanding of the mediating effects of affective commitment on the relationship between the number of T&D events that employees participate in and their propensity to enact IWBs. To our knowledge, no empirical study located in small firms has estimated the mediating effects of affective commitment on the relationship between participation in T&D events and IWBs. The results of the present study suggest that affective commitment mediates the relationship between the number of T&D events attended and employees' propensity to enact IWBs (Hypothesis 3). This implies that facilitation of IWBs is reliant upon both the knowledge and skills of employees and their affective commitment to the organisation. Given that affective commitment is a form of long term motivation (Meyer, 2017), an interesting line of inquiry would be to investigate whether work engagement (Bakker, 2017) also mediates the relationship between the number of T&D events attended and employees' propensity to enact IWBs. Affective commitment and work engagement are conceptually distinct, because affective commitment is a state of positive attachment to the larger work organisation, by contrast the job, not the organisation, is the key referent of work engagement (Macey and Schneider 2008).

As noted, this study found that neither participation in just training events (after controlling for participation in development), nor participation in just development events (after controlling for participation in training), was significantly associated with variance in either affective commitment or IWBs. One potential explanation for these findings is that the overall levels of employee participation in T&D events in the sample firms was low. Therefore, employee participation in both training events and development events had to be factored in to the statistical analysis to produce a statistically significant variance in employees' affective commitment and IWBs.

#### *Practical implications*

Overall, the results suggest that when small firms provide opportunities for their employees to participate in formal T&D events, employees are likely to reciprocate with strong and positive feelings towards the organisation. Further, when employees receive access to T&D events, they develop the cognitive resources (for example, new knowledge, insights, and perspectives) that enable them to enact IWBs. **The adoption of policies and practices supportive of T&D appear to be associated with higher levels of employee participation in T&D events.** In small firms, the medium for employee learning is primarily on-the-job experiences, that is, learning independently through everyday work activities and through interactions with more experienced co-workers (Billett *et al.*, 2015). **Small firms typically do not have the financial resources to formally train and develop their employees (Cardon and Valentin, 2017).** However, our results suggest that an over-reliance on wholly work-based experiences for immediate learning needs and reluctance on the part of owner-managers to support learning through participation in structured T&D might constrain the development of positive work-related attitudes and behaviours. Such an approach to learning for work can weaken an employee's loyalty to the firm and their willingness to exert effort on behalf of the firm, and thus may have a dampening effect on the individual IWBs that are essential for the enhancement of the economic viability and competitive advantage of the firm.

#### *Limitations and future research implications*

In conducting this study, practical constraints affected design decisions, which subsequently imposed limitations upon the research. One such limitation was that non-random sampling was used to recruit participants, which affected the generalisability of the results. Future studies are encouraged to employ random sampling to minimise these effects. In this study, the measurement of independent and dependent variables was provided by the same person, which could affect the relationships between variables because of CMB (Podsakoff *et al.*, 2003). This study also used self-reporting methods for key constructs. Future studies should complement self-rating with peer and supervisor ratings. Cross-sectional data was used by this study, whereas future studies should consider longitudinal designs, such as introducing a time lag between the measurement of T&D events and the measurement of commitment and IWBs (Podsakoff *et al.*, 2003). Future studies should assess the generalisability of the results by replicating the study in different small firm sectors to rule out the professional services sector as an important contingency factor. Small business employees in the professional services sector may have greater opportunities to participate in T&D than small business employees in other sectors. Access to formal, structured T&D opportunities may be a particularly salient job resource for small firm employees in the professional services sector, because of the nature of their job demands. **Future research should also compare results across different types of professional services firms, because innovation may be more highly valued in some types of professional services firms (e.g., engineering consultancies).**

#### **Conclusion**

Small firms are both numerically significant and major providers of employment in national economies (Muller *et al.*, 2015). Yet there is limited research on how T&D affects key employee attitudes and behaviours, especially in firms with 50 or fewer staff (Cardon and Valentin, 2017). To address this limitation of the literature, the present study examined whether two work context variables were related to levels of participation in T&D, and whether levels of participation in T&D events were associated with employees' affective commitment and propensity to enact IWBs in small firms. Using data from 203 employees in small professional services firms, our analyses suggests that policy and practice supportive of T&D can indeed influence levels of T&D activity and that providing employees with opportunities to participate in T&D events will promote both employees' commitment to the organisation and their propensity to enact IWBs. These findings have important implications for small firms which tend to rely on wholly work-based experiences for the development of employees' knowledge and skills. Such an approach to learning for work may inadvertently shape a workforce that lacks commitment to the organisation and that has a diminished capacity for IWB.

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Table 1. Demographic data

Measure	Items	Frequency	Percentage
Company age	Less than 5 years	12	5.9
	5-10 years	66	32.5
	10-20 years	55	27.1
	More than 20 years	70	34.5
Gender	Male	82	40.4
	Female	121	59.6
Age	Under 30	70	34.5
	30-40	63	31
	41-50	43	21.2
	51-60	19	9.4
	61+	8	3.9
	Type of employment	Full-time	159
Part-time		33	16.3
Casual/contract		11	5.4
Job category	Manager	47	23.2
	Non-manager	156	76.8
Education level	Secondary school	37	18.2
	Trade or equivalent	37	18.2
	Diploma	42	20.7
	Undergraduate	36	17.7
	Postgraduate	48	23.6
	Others	3	1.5
Time in this job	Less than 1 year	44	21.7
	1 < 2 years	36	17.7
	2 < 5 years	66	32.5
	5-10 years	34	16.7
	More than 10 years	23	11.3
Firm category	Accounting & Finance	15	38.5
	Engineering Consultancies	13	33.3
	Property Agencies	5	12.8
	Other Professional Services	6	15.4

Table 2. Results for means, standard deviations, correlations, and Cronbach's alphas

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender	1.60	1.123														
2. Age	2.17	1.123	-.178*													
3. Type of employment	1.27	.554	.131	.131												
4. Job category	1.77	.423	.215**	-.280***	.058											
5. Education	3.15	1.468	-.184**	.029	-.031	-.040										
6. Time in this job	2.78	1.275	-.140*	.344***	-.071	-.167*	.049									
7. Company age	2.90	.949	.063	.141*	-.071	-.032	-.103	.191**								
8. Participation in T&D events	1.95	1.155	-.154*	-.016	-.025	-.012	.052	.044	-.016	(.856)						
9. Participation in development events	1.94	1.180	-.143*	-.054	-.060	-.029	.042	.029	.11	.957***	(.705)					
10. Participation in training events	1.96	1.230	-.152*	.022	.010	.006	.057	.055	-.041	.960***	.837***	(.744)				
11. Attitudes towards training	5.24	1.169	.195**	-.142*	.025	-.041	-.073	-.169*	-.067	-.080	-.078	-.075	(.897)			
12. Training policies and practices	4.47	1.329	.060	-.062	-.002	.106	.015	-.024	-.055	.448***	.411***	.447***	.063	(.900)		
13. Affective commitment	4.93	1.242	.041	-.112	-.025	.151*	-.006	-.043	-.115	.265***	.268***	.240**	.410***	.124	(.797)	
14. IWB	4.59	1.304	-.042	.099	.020	-.118	-.006	.093	-.005	.279***	.282***	.253***	.227***	.089	.319***	(.912)

IWB = innovative work behaviour; T&D = training and development. SD = standard deviation. Values in ( ) = Cronbach's alpha. \*P < .05; \*\*P < .01; \*\*\*p < .001.

Table 3. Multiple regression results: Associations between 'attitudes towards training' and 'training policies and practices' and participation in T&D events

	B	SE	$\beta$
Constant	.744	.401	
Attitudes towards training	-.107	.062	-.108
Training policies and practices	.395	.055	.455***
	$R^2 = .212$	$F = 26.962$	***

\*\*\*P < .001

Table 4. Results relating to the mediating role of affective commitment in the link between participation in T&D events and IWB

<b>Outcome</b>		<b>B</b>	<b>Boot SE</b>	<b>t-value</b>	<b>95% bootstrapped CI</b>	
					<b>LLCI</b>	<b>ULCI</b>
Affective commitment	Constant	4.3751***	.1657	26.4103	4.0485	4.7018
	Participation in T&D events	.2850***	.0731	3.8971	.1408	.4292
		$R^2 = .2650$	$\Delta R^2 = .0702$		$F(1, 201) = 15.187***$	
IWB	Constant	2.7629***	.3542	7.8006	2.0645	3.4613
	Participation in T&D events	.2357**	.0767	3.0737	.0845	.3869
	Affective commitment	.2764***	.0713	3.8744	.1357	.4170
		$R^2 = .3768$	$\Delta R^2 = .1420$		$F(2, 200) = 16.5482***$	
<b>Indirect effect</b>						
Participation in T&D events -> affective commitment -> IWB		.0788	.0284	-	.0343	.1112

LLCI = lower level confidence interval; ULC = upper level confidence interval; IWB = innovative work behaviour; T&D = training and development. \*\*P < .01; \*\*\*p < .001.

Table 5. Results relating to associations between ‘participation in training events’ and ‘participation in development events’ and affective commitment

		B	SE	$\beta$
<b><i>For participation in training events</i></b>				
Model 1	Constant	4.454	.160	
	Participation in training events	.243	.069	.240**
		$R^2 = .058$	$F(1,201) = 12.332***$	
Model 2	Constant	4.370	.166	
	Participation in development events	.236	.131	.224
	Participation in training events	.053	.126	.053
		$R^2 = .073$	$F(1, 200) = 7.850**$	
		$\Delta R^2 = .001$		
<b><i>For participation in development events</i></b>				
Model 1	Constant	4.384	.162	
	Participation in development events	.282	.072	.268***
		$R^2 = .072$	$F(1,201) = 15.583***$	
Model 2	Constant	4.370	.166	
	Participation in training events	.053	.126	.053
	Participation in development events	.236	.131	.224
		$R^2 = .073$	$F(1, 200) = 7.850**$	
		$\Delta R^2 = .001$		

\*\*P < .01; \*\*\*p < .001.

Table 6. Results relating to associations between ‘participation in training events’ and ‘participation in development events’ and innovative work behaviour

		B	SE	$\beta$
<i>For participation in training events</i>				
Model 1	Constant	4.060	.168	
	Participation in training events	.268	.072	.253***
		$R^2 = .064$	$F(1,201) = 13.692***$	
Model 2	Constant	3.966	.174	
	Participation in development events	.261	.137	.236
	Participation in training events	.058	.131	.055
		$R^2 = .080$ $\Delta R^2 = .017$	$F(1, 200) = 8.748***$	
<i>For participation in development events</i>				
Model 1	Constant	3.982	.170	
	Participation in development events	.312	.075	.282***
		$R^2 = .080$	$F(1,201) = 17.370***$	
Model 2	Constant	3.966	.174	
	Participation in training events	.058	.131	.055
	Participation in development events	.261	.137	.236
		$R^2 = .080$ $\Delta R^2 = .001$	$F(1, 200) = 8.748***$	

$p < .001***$ .

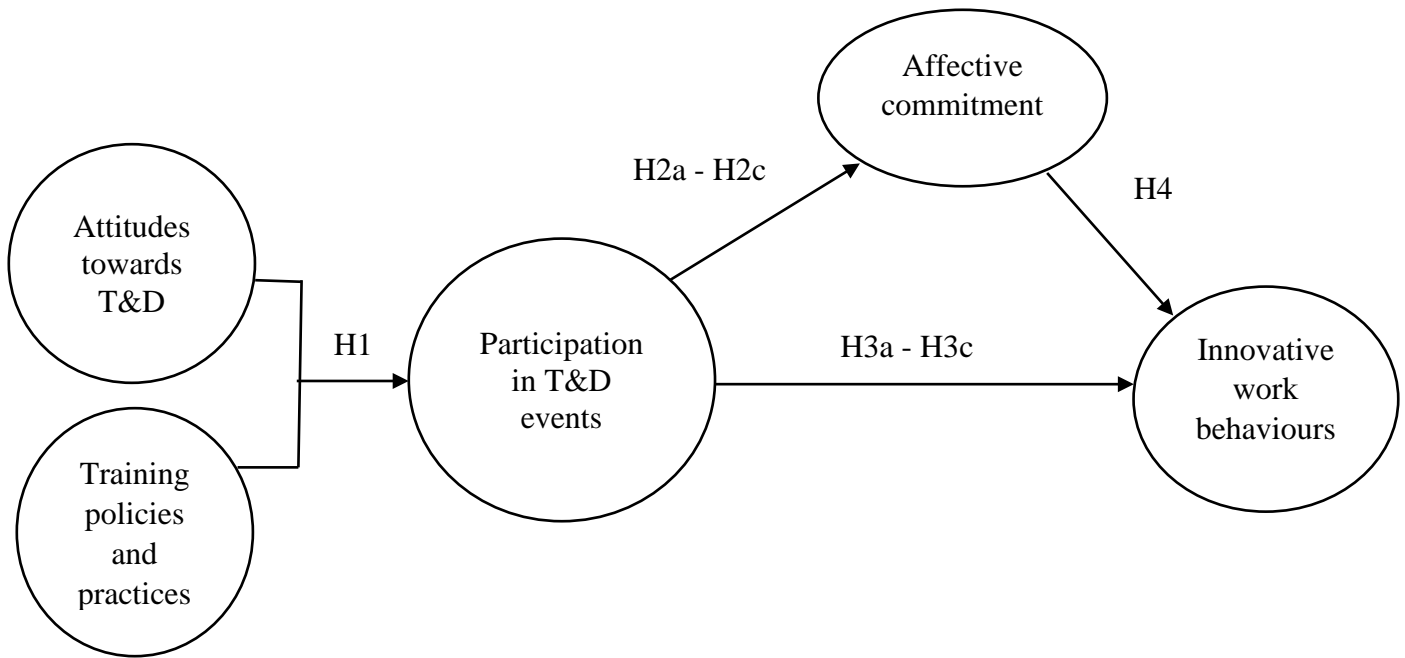


Figure 1. Conceptual model